Appl. No. 09/758,484 Amdt. Dated March 24, 2005 Reply to Office action of January 12, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- (canceled) A packet optimization method comprising:
 generating a metric to indicate a channel condition based on an estimated error rate;
 processing the metric to determine optimal packet-size for the channel condition; and
 choosing the optimal packet-size corresponding to the processed metric to send to a
 requestor.
- 2. (currently amended) The packet optimization A method of claim 1, wherein processing further includes comprising:

generating a metric to indicate a channel condition based on an estimated error rate;

processing the metric to determine optimal packet-size for the channel condition, the
processing comprising:

receiving the metric corresponding to the channel condition[;], and using the received metric to balance a trade-off between the cyclic redundancy check and re-transmission overhead; and

choosing the optimal packet-size corresponding to the processed metric to send to a requestor.

- 3. (currently amended) The packet optimization method of claim [[1]] 2, wherein choosing the optimal packet further includes comprises training a neural network or look-up table to optimally improve system data throughput by selecting a packet corresponding to the channel condition.
- 4. (currently amended) The pucket optimization method of claim [[1]] 2, wherein the optimal packet-size is a packet-size that minimizes both cyclic redundancy check and retransmission overhead.

Docket No: 080398.P347

Page 2 of 13

TVN/tn